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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,692	03/22/2005	Stephane Deleris	21039-00287-US1	9514

30678 7590 07/06/2006

CONNOLLY BOVE LODGE & HUTZ LLP
SUITE 800
1990 M STREET NW
WASHINGTON, DC 20036-3425

EXAMINER

BARRY, CHESTER T

ART UNIT PAPER NUMBER

1724

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/528,692

Applicant(s)

DELERIS ET AL.

Examiner

Chester T. Barry

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/22/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Claims 1 – 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim is directed to a “method for reducing the production of . . . sludge.” It is unclear if a reduction in the amount of sludge falls within the scope of the claim, or only a reduction in the rate of generation of sludge.

With respect to the transitional phrase, the claim reads, “method . . . characterized in that [the method] consists in dissociating the step of reducing sludge production from the purifying step.” This recitation of “consists” suggests that the scope of the claim is not open to performance of steps not positively recited in claim 1.

The terms “low . . . load,” “medium . . . load,” and “high . . . load” in claim 1 are relative terms which render the claim indefinite. These terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. To the extent that applicant argues that while the meaning of “low” may be indefinite, the claim as a whole is not indefinite because all bases are covered by reciting “low, medium, or high,” the examiner notes there is no evidence suggesting that “low load” covers as low as no load, or that “high load” covers all possible loads greater than a “medium load.” That is, there may still be room for an “extremely high load” not covered by “high load.”

It is unclear how, or in what specific respects, the scope of “activated sludge type biological treatment” may encompass treatments that are not activated sludge biological

treatments. In other words, it is unclear to what extent the use of “type” in the phrase “activated sludge type biological treatment” opens the scope of the phrase “activated sludge biological treatment” to other treatments.

It is unclear what “associated with” means in claim 1.

Insofar as the sole substrate source during the activated sludge process comes from lysed cells of the reduced sludge production step, it is not clear how the reduced sludge production step can be optional.

It is unclear in claim 1 whether the thermophilic enzymatic treatment takes place during mechanical stirring, or only the partial oxidation using ozone step takes place during mechanical stirring.

For apparatus claims 2 – 3, it is unclear what *structure* is being claimed. The apparatus of claims 2 – 3 cannot clearly be defined by how it is used unless (and until) the structure of the apparatus is clearly recited.

For the purposes of first action on the merits, Claim 1 is construed as follows:

A method of treating municipal or industrial wastewater treatment plant sludge, said method consisting of:

Treating said sludge to an activated sludge biological process; and

Subjecting the sludge to either a step of thermophilic enzymatic reduced sludge production combined with mechanical stirring, or to a step of partial oxidation using ozone combined with mechanical stirring,


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whereby the sole substrate source consists of organic matter derived from lysed bacteria induced during the reduced sludge production step.

Claim 1 is rejected under 35 USC Sec. 102(b) as clearly anticipated by JP 10057994. The patent describes a method of treating municipal or industrial wastewater treatment plant sludge. That method comprises treating the sludge to an activated sludge biological process (2). The sludge to then subjected to a partial oxidation using ozone (19). The mechanical stirring is accomplished through the stirring effect of ozone gas added via a mechanical blower to the liquid. The sole substrate source consists of organic matter derived from lysed bacteria induced during a reduced sludge production step.

Claims 2 – 3 are rejected under 35 USC Sec. 102(b) as clearly anticipated by any one of JP 10057994, JP1052697, JP 10137780 insofar as each reference shows a vessel in which activated sludge biological treatment takes place, and a sludge separation vessel.

Objection is made to claims 1 – 3 for misspelling "thermophilic" as "theremophilic." In claim 1, "lysed" is a preferred spelling of "lyzed."


CHESTERT T. BARRY
PRIMARY EXAMINER

571-272-1152